

different faunas are no more to be ascribed to the influences of climate, than their organization is to the influence of the physical forces of nature. If it were so, we should necessarily find all animals precisely similar, when placed under the same circumstances. We shall find, by the study of the different groups in detail, that certain species, though very nearly alike, are nevertheless distinct in two different faunas. Between the animals of the temperate zone of Europe, and those of the United States, there is similarity but not identity; and the particulars in which they differ, though apparently trifling, are yet constant.

444. Fully to appreciate the value of these differences, it is often requisite to know all the species of a genus or of a family. It is not uncommon to find, upon such an examination, that there is the closest resemblance between species that dwell far apart from each other, while species of the same genus, that live side by side, are widely different. This may be illustrated by a single example. The *Menopoma*, *Siren*, *Amphiuma*, *Axolotl*, and the *Menobranchus*, are Batrachians which inhabit the rivers and lakes of the United States and Mexico. They are very similar in external form, yet differ in the fact that some of them have external gills at the sides of the head, in which others are deficient; that some have five legs, while others are only provided with two; and also in having either two or four legs. Hence we might be tempted to refer them to different types, did we not know intermediate animals, completing the series, namely, the *Proteus* and *Megalobatrachus*. Now, the former exists only in the subterranean lakes of Austria, and the latter in Japan. The connection in this case is consequently established by means of species which inhabit continents widely distant from each other.

445. Neither the distribution of animals, therefore, any more than their organization, can be the effect of external